

inputting data comprising configurations for a plurality of partial circuits,  
connectional relationships for input and output terminals of the partial circuits;

extracting, from the circuit to be simulated, [a] the plurality of partial circuits to  
inspect for equivalent operational characteristics;

inspecting the plurality of partial circuits to detect partial circuits exhibiting  
equivalent operational characteristics, based on the configurations of the plurality of partial  
circuits; and

[carrying out circuit simulation after the circuit is compressed] compressing the  
circuit by integrating the partial circuits exhibiting equivalent operational characteristics into  
one circuit and simulating the compressed circuit.

15. (ONCE AMENDED) The method of claim 9, further comprising assessing the

intensity of influence of an external terminal of the circuit by tracing paths linking the external  
terminal and one or more terminals [given terminals] of the plurality of partial circuits.

21. (ONCE AMENDED) A system for carrying out simulation of a circuit,  
comprising:

a data input unit inputting data comprising configurations for a plurality of  
partial circuits, connectional relationships for input and output terminals of the partial circuits;

a circuit extracting unit for extracting, from the circuit to be simulated, [a] the  
plurality of partial circuits to inspect for equivalent operational characteristics;

a storage unit for holding data concerning configurations of the plurality of  
partial circuits; and

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a circuit-equivalence inspecting unit for detecting partial circuits exhibiting equivalent operational characteristics by inspecting the plurality of partial circuits on the basis of the configurations of the plurality of partial circuits,

wherein [circuit simulation is carried out after the circuit is compressed] the circuit to be simulated is compressed by integrating the partial circuits exhibiting equivalent operational characteristics into one circuit and circuit simulation is performed on the compressed circuit.

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27. (ONCE AMENDED) The system of claim 21, further comprising an assessing unit [for] assessing the intensity of influence of an external terminal of the circuit by tracing paths linking the external terminal and one or more terminals [given terminals] of the plurality of partial circuits.

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33. (ONCE AMENDED) An apparatus for carrying out simulation of a circuit, comprising:

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a data input unit inputting data comprising configurations for a plurality of partial circuits, connectional relationships for input and output terminals of the partial circuits,

a circuit extracting unit for extracting, from the circuit to be simulated, [a] the plurality of partial circuits to inspect for equivalent operational characteristics;

a storage unit for holding data concerning configurations of the plurality of partial circuits; and

a circuit-equivalence inspecting unit for detecting partial circuits exhibiting equivalent operational characteristics by inspecting the plurality of partial circuits on the basis of the configurations of the plurality of partial circuits,

wherein [circuit simulation is carried out after the circuit is compressed] the circuit to be simulated is compressed by integrating the partial circuits exhibiting equivalent operational characteristics into one circuit and circuit simulation is performed on the compressed circuit.

39. (ONCE AMENDED) The apparatus of claim 33, further comprising an assessing unit [for] assessing the intensity of influence of an external terminal of the circuit by tracing paths linking the external terminal and one or more terminals [given terminals] of the plurality of partial circuits.

45. (ONCE AMENDED) A method for simulating a circuit, comprising:  
inputting data comprising configurations for a plurality of partial circuits,  
connectional relationships for input and output terminals of the partial circuits,  
extracting and inspecting [a] the plurality of partial circuits, from the circuit to be simulated, for equivalent operational characteristics based on the configurations of the partial circuits; and  
integrating the equivalent partial circuits into one circuit to which circuit simulation is applied.

#### REMARKS

This preliminary amendment is submitted in response to the Advisory Action of December 1, 2000 and the final Office Action of June 21, 2000. Claims 9-45 are pending in this application. Claims 9, 15, 21, 27, 33, 39, and 45 have been amended. It is respectfully requested that this Preliminary Amendment be entered in the above-referenced application.

#### OBJECTIONS TO THE DRAWINGS:

On page 2 of the final Office Action, the Examiner objected to FIGS. 1 and 2. In view of the accompanying separate Letter to the Examiner Requesting Approval of Changes to the Drawings, corrections to FIGS. 1A, 1B and 2 have been requested. Therefore, the outstanding drawings objections should be resolved.